REDEFINING GAMES

• WHY DO WE PLAY?
• WHY DOES AN ARTIST CREATE?
• WHY DO WE PLAY MUSIC?
• WHY DO WE DANCE?
• WHY DO WE HAVE FUN?
Games can combine all art forms, physical, & social interactions into a unique experience.
REDEFINING GAMES

Using all the senses we can explore new novel forms of expression using Sight, Sound, Touch, Smell, & Taste
REDEFINING GAMES

Current games have a huge focus on Video/Sight, & largely ignore the huge opportunity to explore rich Sound, Touch. How does VR and other new technology add to this redefinition?
TECHNOLOGY WAVE 2015

• Wearables
• VR headsets
• Finger/Hand Tracking
• Brainwave Readers
• Eye Tracking
• Haptic Feedback
TECHNOLOGY WAVE ACQUISITIONS

Facebook Acquired Oculus

TECHNOLOGY WAVE ACQUISITIONS

Microsoft Acquires Minecraft/
TECHNOLOGY WAVE ACQUISITIONS

Microsoft Hololens & Surface
AUGMENTED REALITY

Vuforia plugin for Unity
VR VIVE TRACKING ROOM

HTC & VALVE
NOD FINGER TRACK W/BUTTON
APPLE WATCH
BRAINWAVE READERS

Emotive
HAND TRACKING & WEARABLES

David Holz CTO Leap Motion

http://blog.leapmotion.com/david-holz-quick-peek-future-wearable-displays-inputs/
TECHNOLOGY WAVE ACQUISITIONS

Mixamo Acquired by Adobe
SUGGESTIVE MODELING
CHARACTERS/CHIMERAS

Figure 6: Models created by artists for the non-fatigued (top) and the non-fatigued (bottom). From the models, the figures on the initial...
PROCEDURAL MODELING
HARD SURFACE
PROCEDURAL MODELING
SIGGRAPH TREES/ARCH
PROCEDURAL MODELING
LEVELS SKYRIM/CITIES
PROCEDURAL MODELING
SPEECH/GESTURE CONTROLS
TECHNOLOGY WAVE FREE!!

Autodesk for education (.edu) FREE
Unreal Engine FREE
Unity almost FREE
Sculptris/Gimp FREE
Some new hardware Dev Kits are free
GAME DEV RESOURCES

• Gamasutra/GDC
  • www.gamasutra.com

• Games for Change
  • https://www.youtube.com/user/GamesForChange

• Extra Credits
  • https://www.youtube.com/user/ExtraCreditz

• Zero Punctuation, "Yahtzee" Croshaw
  • http://www.escapistmagazine.com/videos/view/zero-punctuation
GAME DEV TERMS/TECHNIQUES

- Level Design
- Concept Art
- Modeling
- Rigging/Animation
- Particles/FX
- World Building
- Ai Programming
- ............many more
- Gameplay Programming
- Lighting
- Shaders, Materials
- Texture/UV Mapping
- Scripting
- UI/GUI/UX Design
- Sound/Music Designer
GAME DEV TERMS/TECHNIQUES

• KitBashing
  • https://en.wikipedia.org/wiki/Kitbashing

• Game Jams
  • http://globalgamejam.org/
  • http://www.indiegamejams.com/about-us/
Focus on tasks that are satisfying to complete. This means to make a game challenge fun, one must balance how much work it takes to accomplish a task. To create flow, the activity must be goal directed and bounded by rules, that could not be done without the proper skills. The uncertainty of the outcome makes the activity challenging.
STRUCTURED VS OPEN PLAY

STRUCTURED

VS

FREE (OPEN) PLAY
GAMEPLAY ELEMENTS

• Tools
• Rules
• Skills, Strategy, or Chance
• Single vs Multiplayer
GAME TYPES

• SPORTS
• TABLE TOP
• VIDEO GAMES
• ROLE-PLAYING GAMES
• BUSINESS GAMES
• SIMULATION
TABLE TOP SUBSET

- Board games
- Dice games
- Miniature games
- Paper and pencil games
- Tile-based games (e.g. Mahjong, Dominoes, Anagrams)
- Role-playing games
TABLE TOP QUICKLOOK

• Board Game Geek
  https://boardgamegeek.com/
• Origins Game Fair
• GenCon
VIDEO GAME SUBSET

• Genre (Action, Platformer, etc)

• Platform (Mobile, PS, Xbox, PC, etc)
  • Gameplay Style
  • Visual/Narrative Style
MAKING A GAME
WHERE TO START?

• PLAYER
• OBJECTIVE
• CORE MECHANIC
• CHALLENGE
PLAYER INTERACTIONS

Single Player vs Game

Player vs Player

Multiple Individuals vs Game: Multiple players vs Game System, but in the company of others, like Black Jack.

Multilateral Competition: 3 or more players, everyone vs everyone

Unilateral Competition: 2 or more players compete against one player

Cooperative Play: Players vs Game System

Team Competition: Team DM or CTF
TYPES OF PLAYERS

Competitor
Explorer
Collector
Achiever
Joker

Artist
Director
Storyteller
Performer
Craftsman
The Competitor

Plays to best other players, regardless of the game
The Explorer

Curious about the world, loves to go adventuring; seeks outside boundaries—physical or mental
The Collector

Acquires items, trophies, or knowledge; likes to create sets, organize history, etc.
The Achiever

Plays for varying levels of achievement; ladders and levels incentivize the achiever
The Joker

Doesn’t take the game seriously—plays for the fun of playing; there’s a potential for jokers to annoy serious players, but on the other hand, jokers can make the game more social than competitive
The Artist

Driven by creativity, creation, design
The Director

Loves to be in charge, direct the play
The Storyteller

Loves to create or live in worlds of fantasy and imagination
The Performer

Loves to put on a show for others
The Craftsman

Wants to build, craft, engineer, or puzzle things out
OBJECTIVES

Capture: Take or destroy something from an opponent without being captured or killed yourself.

Chase: Catch or elude your opponent.

Race: Reach a physical or conceptual goal first.

Alignment: Create certain arrangements or configurations in game.

Rescue or Escape:

Forbidden Act: Get the competition to break the rules, make a wrong move, etc.

Construction: Build, maintain, or manage objects such as Sims.

Exploration: Explore game areas, but usually combined with other objectives.

Solution: Solve a problem or puzzle before the competition.

Outwit: Gain or use knowledge to defeat your opponent, such as Jeopardy!
Focus on tasks that are satisfying to complete. This means to make a game challenge fun, one must balance how much work it takes to accomplish a task. To create flow, the activity must be goal directed and bounded by rules, that could not be done without the proper skills. The uncertainty of the outcome makes the activity challenging.
From Mihaly Csikszentmihalyi’s “Flow”
The Psychology of Optimal Experience, that state of Concentration
**Skills:** Can be Physical, Mental, Social, etc.

**Action and awareness blend together.**

**Clear Goals and Feedback:** Providing a clear goal, with direct feedback of good/bad actions helps keep the player engaged in the game.

**Concentration on the Task at Hand:** Creating a state for the player so they are only conscience of the here and now is critical to creating flow.

**The Paradox of Control:** One can only feel in control if they are truly not in total control so that the outcome is still uncertain.

**The Loss of Self-Consciousness:** One must be so immersed as to care little about protecting their ego. The self then may expand through the acts of self-forgetfulness.

**The Transformation of Time:** Usually time will seem to pass much faster, but in some instances of Flow, the player may experience an extremely long time distortion, say in the middle of a fast, but intense Boss-battle, time may seem to pass very slowly with each move happening in vivid clarity, like the final seconds determining the outcome of a sports game.

**Experience Becomes the End to Itself:** When most of the above conditions are met, we begin to enjoy the activity so much that to experience it is more fulfilling then the end goal or outcome.
DRAMATIC ELEMENTS

Tracy Fullerton “Game Design Workshop”
A Playcentric Approach to Creating Innovative Games

- Challenge
- Play
- Premise
- Character

- Story
- World Building
- The Dramatic Arc
PLAYER ENGAGEMENT

Levels of Engagement: Players may be engaged at different levels to find the same enjoyment in a game.

Spectator vs. Participant?

Games as Art, Real Learning (Serious Games), Interactive Experiences (Music/Cinema)
PREMISE

Establishing the action of the game within the setting or metaphor.

Traditional Exposition: Premise is handled in traditional story telling through an early Exposition that sets up the time, place, characters, and their relationships.
CHARACTER

Main Character is the Protagonist:
Can be a predesigned character or player created avatar.

Free Will vs. Player Control

Tri-Dimensional Character Creation

Physical
Mental
Social
Most games have an elaborate premise (or Backstory) that has an ending determined by the players actions. This gives setting and the context for conflict, and can create player motivation.

We can set the stage & allow the players on the stage & audience to create their own collaborative story & experience.
PLAYERCENTRIC DESIGN
RAPID PROTOTYPING & EMERGENT GAMEPLAY

• Get your core mechanic & challenge prototyped quickly
• Allow the tools & technology to become part of your design & the creative process
• Embrace “happy accidents” & gameplay that evolves through play & testing
KEEP IT SIMPLE TO START
“LEVELS OF ABSTRACTIONS”